



LIST OF CONTENTS

VOLUME 33, NUMBER 1

1995

Contents

- | | | |
|--|----|---|
| | 1 | Editorial |
| M. C. Román-Martínez,
D. Cazorla-Amorós,
A. Linares-Solano,
C. Salinas-Martínez de Lecea,
H. Yamashita, and
M. Anpo | 3 | Metal-support interaction in Pt/C catalysts. Influence of the support surface chemistry and the metal precursor |
| F. Rodríguez-Reinoso,
M. Molina-Sabio, and
M. T. González | 15 | The use of steam and CO ₂ as activating agents in the preparation of activated carbons |
| B. S. Kim,
R. A. Hayes, and
J. Ralston | 25 | The adsorption of anionic naphthalene derivatives at the graphite-aqueous solution interface |
| Q. Zhu,
K. Grant, and
K. M. Thomas | 35 | The incorporation of nitrogen into isotropic carbons and its release during temperature-programmed combustion |
| F. G. Emmerich | 47 | Application of a cross-linking model to the Young's modulus of graphitizable and non-graphitizable carbons |
| A. Sarkar,
H. W. Kroto, and
M. Endo | 51 | Hemi-toroidal networks in pyrolytic carbon nanotubes |
| J. D. Chen and
C. P. Ju | 57 | Low energy tribological behavior of carbon-carbon composites |
| E. Papirer,
R. Lacroix,
J.-B. Donnet,
G. Nansé, and
P. Fioux | 63 | XPS study of the halogenation of carbon black — part 2. Chlorination |
| T. Ueda,
T. Morimoto,
H. Kumagai, and
Y. Sanada | 73 | An additional carbon layer over the surface of C/C composite substrate with the aid of polyvinyl chloride |
| P. E. Nolan,
M. J. Schabel,
D. C. Lynch, and
A. H. Cutler | 79 | Hydrogen control of carbon deposit morphology |

J. F. Despres, E. Daguère, and K. Lafdi	87	Flexibility of graphene layers in carbon nanotubes
Yu. V. Isaev, T. V. Fakuliya, A. A. Filippov, L. B. Itzikson, N. D. Lenenko Yu. N. Novikov, and D. Guerard	89	Anionic polymerization of styrene in the presence of GICs with alkali metal. The influence of solvating medium and opposite ion
O. G. Epanchintsev, A. E. Korneyev, and A. A. Dityatyev	91	Thermal stability of carbon phases recovered from shock-loaded fullerenes
	93	Carbon News
	96	Carbon Calendar

VOLUME 33, NUMBER 2

1995

Contents

Y. Huang and R. J. Young	97	Effect of fibre microstructure upon the modulus of PAN- and pitch-based carbon fibres
J. H. Choi, H. Kumagai, T. Chiba, and Y. Sanada	109	Carbonization of pitches in air blowing batch reactor
V. Mennella, G. Monaco, L. Colangeli, and E. Bussoletti	115	Raman spectra of carbon-based materials excited at 1064 nm
A. Moissette, H. Fuzellier, A. Burneau, J. Dubessy, and M. Lelaurain	123	Sulfate graphite intercalation compounds: New electrochemical data and spontaneous intercalation
B. Buczek, A. Świątkowski, and J. Goworek	129	Adsorption from binary liquid mixtures on commercial activated carbons
R. Setton	135	Carbon nanotubes: I. Geometrical considerations
S. Sato, A. Kurumada, K. Kawamata, H. Suzuki, E. Yasuda, and H. Awaji	141	Fracture verification of fine grain isotropic graphites containing imitative defects subsequent to round robin test of non-destructive inspection
V. A. Nalimova, M. El Gadi, D. Guerard, P. Lagrange, D. Sklovsky, and C. Hérol	153	New type of pressure-induced phase transition in potassium graphite intercalation compounds

C. Guéret, F. Billaud, B. Fixari, and P. Le Perchec	159	Thermal coupling of methane, experimental investigations on coke deposits
Y. Ando	171	A carbyne observed in a marketing microgrid
A. Nalimova, D. Guérard, M. Lelaurain, and O. V. Fateev	177	X-ray investigation of highly saturated Li-graphite intercalation compound
N. Nakao, K. Kitagawa, M. Sasaki, and T. Hirai	183	High-pressure chemical vapor deposition for preparation of carbon
C. Yamaguchi, J. Mondori, A. Matsumoto, H. Honma, H. Kumagai, and Y. Sanada	193	Air-blowing reactions of pitch: I. Oxidation of aromatic hydrocarbons
H. Hirai, K. Kondo, and T. Ohwada	203	Diamond synthesis by shock compression from a thin graphite plate with suppressed regraphitization
N. Manolova, I. Rashkov, D. Legras, S. Delpeux, and F. Beguin	209	Separation of C ₆₀ /C ₇₀ mixture on activated carbon and activated carbon fibres
R. Qadeer and J. Hanif	215	Adsorption of dysprosium ions on activated charcoal from aqueous solutions
S. Biniak	221	Preparation and characterization of novel IR-transparent semiconducting carbonaceous materials
M. Liu and J. M. Cowley	225	Encapsulation of lanthanum carbide in carbon nanotubes and carbon nanoparticles
<i>Letters to the Editor</i>		
R. H. Bradley, E. Sheng, I. Sutherland, and P. K. Freakley	233	Adsorption of a diamine salt of carboxylic acid by carbon blacks
S. Herreyre and P. Gadelle	234	Effect of hydrogen on the morphology of carbon deposited from the catalytic disproportionation of CO
D. Heymann	237	Search for ancient fullerenes in anthraxolite, shungite, and thucolite
P. L. Walker, Jr. and A. Almagro	239	Activation of pre-chlorinated anthracite in carbon dioxide and steam
	242	Carbon News
	246	Carbon Calendar

Contents

- | | | |
|--|-----|--|
| A. Madroñero and
M. Verdú | 247 | Hydrogen content evaluation in vapour-grown carbon fibres by SIMS |
| M. Jayasankar,
R. Chand,
S. K. Gupta, and
D. Kunzru | 253 | Vapor-grown carbon fibers from benzene pyrolysis |
| W. Rybak,
P. Chambrion, and
J. Lahaye | 259 | Oxidation of carbon black particles in a premixed flame under pressure |
| I. Mochida,
R. Fujiura,
T. Kojima,
H. Sakamoto, and
T. Yoshimura | 265 | Carbon disc of high density and strength prepared from heat-treated mesophase pitch grains |
| K. Miura,
H. Nakagawa, and
K. Hashimoto | 275 | Examination of the oxidative stabilization reaction of the pitch-based carbon fiber through continuous measurement of oxygen chemisorption and gas formation rate |
| S. Bourbigot,
M. Le Bras,
R. Delobel,
P. Bréant, and
J.-M. Trémillon | 283 | Carbonization mechanisms resulting from intumescence — part II. Association with an ethylene terpolymer and the ammonium polyphosphate-pentaerythritol fire retardant system |
| J. J. Fernández,
A. Figueiras,
M. Granda,
J. Bermejo, and
R. Menéndez | 295 | Modification of coal-tar pitch by air-blowing — I. Variation of pitch composition and properties |
| C. Hung | 309 | Room-temperature fluorine-induced decrease in the stability of bromine and iodine intercalated carbon fibers |
| C. Hung | 315 | Ferric chloride-graphite intercalation compounds prepared from graphite fluoride |
| W.-Ch. Oh,
N.-Ky. Bae,
Y.-Ja. Choi, and
Y.-Sh. Ko | 323 | Structural stability and electron energy state of the H ₂ SO ₄ -graphite deintercalation compounds |

Letters to the Editor

- | | | |
|--|-----|--|
| D. Sklovsky,
V. Nalimova,
C. Hérolde,
P. Lagrange, and
D. Guerard | 329 | New rubidium-graphite intercalation compounds |
| M. Sharon,
K. Mukhopadhyay,
I. Mukhopadhyay, and
K. M. Krishna | 331 | Semiconducting multichannel-multilayer camphoric tubules |

Y. Uchiyama, S. Araki, H. Sano, and K. Kobayashi	333	Effect of lanthanum compound addition on the lattice parameter of petroleum coke
T. G. Cleveland and S. Garg	335	Fullerene waste as a carbonaceous adsorbent
H. F. Stoeckli and L. Currit	338	The fractal character of carbon surfaces determined by Fourier analysis of STM data
S. Wang, D. Chen, and D. Zhou	341	A structural study of strings of multi-shell graphitic particles
J. Economy, M. Daley, E. J. Hippo, and D. Tandon	344	Elucidating the pore structure of activated carbon fibers through direct imaging using scanning tunneling microscopy (STM)
	346	Carbon News
	348	Carbon Calendar

VOLUME 33, NUMBER 4

1995

SPECIAL ISSUE:*Oxidation Protection of Carbon Composites**Contents*

	349	Editorial
T. Morimoto, Y. Ogura, M. Kondo, and T. Ueda	351	Multilayer coating for carbon-carbon composites
O. Yamamoto, T. Sasamoto, and M. Inagaki	359	Antioxidation of carbon-carbon composites by SiC concentration gradient and zircon overcoating
W. Cermignani, T. E. Paulson, C. Onneby, and C. G. Pantano	367	Synthesis and characterization of boron-doped carbons
M. A. Rooke and P. M. A. Sherwood	375	X-ray photoelectron spectroscopic study of the effect of ion etching of silicon carbide on a carbon fiber
C. C. Landry and A. R. Barron	381	MOCVD of alumina-silica oxidation resistant coatings on carbon fibers
C. G. Cofer and J. Economy	389	Oxidative and hydrolytic stability of boron nitride—A new approach to improving the oxidation resistance of carbonaceous structures
K. Kobayashi, K. Maeda, H. Sano, and Y. Uchiyama	397	Formation and oxidation resistance of the coating formed on carbon material composed of B ₄ C-SiC powders

N. Iwashita, Y. Sawada, K. Shimizu, S. Shinke, and H. Shioyama	405	Effect of matrix texture on tensile strength and oxidation behavior of carbon fiber reinforced carbon composites
W. Kowbel, J. C. Withers, and P. O. Ransone	415	CVD and CVR silicon-based functionally gradient coatings on C-C composites
Y.-Q. Wang, B.-L. Zhou, and Z.-M. Wang	427	Oxidation protection of carbon fibers by coatings
L. M. Manocha and S. M. Manocha	435	Studies on solution-derived ceramic coatings for oxidation protection of carbon-carbon composites
W. Liu, Y. Wei, and J. Deng	441	Carbon-fiber-reinforced C-SiC binary matrix composites
M. Guo, K. Shen, and Y. Zheng	449	Multilayered coatings for protecting carbon-carbon composites from oxidation
T. Piquero, H. Vincent, C. Vincent, and J. Bouix	455	Influence of carbide coatings on the oxidation behavior of carbon fibers
T. Li and X. Zheng	469	Oxidation behaviour of matrix-modified carbon-carbon composites at high temperature
J. C. Han, X. D. He, and S. Y. Du	473	Oxidation and ablation of 3D carbon-carbon composite at up to 3000°C
T. L. Dhami, O. P. Bahl, and B. R. Awasthy	479	Oxidation-resistant carbon-carbon composites up to 1700°C
F. J. Buchanan and J. A. Little	491	Particulate-containing glass sealants for carbon-carbon composites
N. E. LoBiondo, L. E. Jones, and A. G. Clare	499	Halogenated glass systems for the protection of structural carbon-carbon composites
W. P. Hoffman, H. T. Phan, and A. Groszek	509	The deposition of silica on carbon as a model system for oxidation protection coatings
F. Lamouroux, X. Bourrat, R. Naslain, and J. Thebault	525	Silicon carbide infiltration of porous C-C composites for improving oxidation resistance
J. W. Fergus and W. L. Worrell	537	Silicon-carbide/boron-containing coatings for the oxidation protection of graphite
J. Rodríguez-Mirasol, P. A. Thrower, and L. R. Radovic	545	On the oxidation resistance of carbon-carbon composites: Importance of fiber structure for composite reactivity

555	Carbon News
557	Proposed By-Laws of the American Carbon Society
559	Carbon Calendar

VOLUME 33, NUMBER 5

1995

Contents

Z. Hu and E. F. Vansant	561	Carbon molecular sieves produced from walnut shell
M. R. Alexander and F. R. Jones	569	Effect of electrolytic oxidation upon the surface chemistry of type A carbon fibres—Part II, Analysis of derivatised surface functionalities by XPS, and TOF SIMS
A. T. Centeno and F. Stoeckli	581	The oxidation of an Asturian bituminous coal in air and its influence on subsequent activation by steam
S. D. Gardner, C. S. K. Singamsetty, G. L. Booth, G.-R. He, and C. U. Pittman, Jr.	587	Surface characterization of carbon fibers using angle-resolved XPS and ISS
Z. Wu, C. U. Pittman, Jr., and S. D. Gardner	597	Nitric acid oxidation of carbon fibers and the effects of subsequent treatment in refluxing aqueous NaOH
Z. Wu, C. U. Pittman, Jr., and S. D. Gardner	607	Bonding epoxide functions to nitric acid-oxidized carbon fibers using epichlorohydrin; a reliable analytical determination of epoxide functions on fiber surfaces
T. Ida, M. Miyake, T. Okura, D. Medhanavin, and M. Nomura	617	Effects of pretreatment on carbonization properties of resin fractions separated from a solvent-refined coal
T. Ida, K. Akada, T. Okura, M. Miyake, and M. Nomura	625	Carbonization of methylene-bridged aromatic oligomers—effect of alkyl substituents
J. R. Kershaw, K. J. T. Black, H. K. Jaeger, R. I. Willing, and J. V. Hanna	633	A comparison of mesophase formation under sparging and vacuum
V. Krebs, M. Elalaoui, J. F. Mareche, G. Furdin, and R. Bertau	645	Carbonization of coal-tar pitch under controlled atmosphere—Part I. Effect of temperature and pressure on the structural evolution of the formed green coke

M. Elalaoui, V. Krebs, J. F. Mareche, G. Furdin, and R. Bertau	653	Carbonization of coal-tar pitch under controlled atmosphere—Part II. Effect of temperature and pressure on the electrical property evolution of the formed green coke
R. Fu, H. Zeng, Y. Lu, S. Y. Lai, W. H. Chan, and C. F. Ng	657	The reduction of Pt(IV) with activated carbon fibers—an XPS study
J.-M. Ting and M. L. Lake	663	Vapor-grown carbon-fiber reinforced carbon composites
M. José-Yacamán, H. Terrones, L. Rendón, and J. M. Domínguez	669	Carbon structures grown from decomposition of a phenylacetylene and thiophene mixture on Ni nanoparticles
R. M. Bustin, J.-N. Rouzaud, and J. V. Ross	679	Natural graphitization of anthracite: Experimental considerations
J. Drbohlav and W. T. K. Stevenson	693	The oxidative stabilization and carbonization of a synthetic mesophase pitch, Part I: The oxidative stabilization process
J. Drbohlav and W. T. K. Stevenson	713	The oxidative stabilization and carbonization of a synthetic mesophase pitch, Part II: The carbonization process

Letters to the Editor

S. R. Mukai, T. Masuda, Y. Fujikata, T. Harada, and K. Hashimoto	733	The production of vapor grown fibers from light paraffins using the liquid pulse injection technique
M. Nakahara and Y. Sanada	735	Effect of argon plasma treatment on graphitic surface structure
	737	Carbon News
	738	Carbon Calendar

Contents

K. Anand and V. Gupta	739	The effect of processing conditions on the compressive and shear strength of 2-D carbon-carbon laminates
M. Liu and J. M. Cowley	749	Encapsulation of manganese carbides within carbon nanotubes and nanoparticles
A. Mavinkurve, S. Visser, and A. J. Pennings	757	An initial evaluation of poly(vinylacetylene) as a carbon fiber precursor

V. Verheyen, R. Rathbone, M. Jagtoyen, and F. Derbyshire	763	Activated extrudates by oxidation and KOH activation of bituminous coal
Y. Kaburagi and Y. Hishiyama	773	Highly crystallized graphite films prepared by high-temperature heat treatment from carbonized aromatic polyimide films
G. Emig, N. Popovska, D. D. Edie, and B.-S. Rhee	779	Surface free energy of carbon fibers with circular and non-circular cross sections coated with silicon carbide
H. Ogawa and K. Saito	783	Oxidation behavior of polyacrylonitrile fibers evaluated by new stabilization index
J. B. Tomlinson, J. J. Freeman, K. S. W. Sing, and C. R. Theocharis	789	Rates of activation and scanning electron microscopy of polyarylamide-derived chars
J. J. Freeman, J. B. Tomlinson, K. S. W. Sing, and C. R. Theocharis	795	Adsorption of nitrogen and water vapour by activated Nomex [®] chars
J. B. Parra, J. C. de Sousa, J. J. Pis, J. A. Pajares, and R. C. Bansal	801	Effect of gasification on the porous characteristics of activated carbons from a semianthracite
A. Moissette, J. Dubessy, H. Fuzellier, A. Burneau, and M. Lelaurain	809	Uranyl-sulfate graphite intercalation compounds—I. Their synthesis and stability
E. A. Heintz	817	Effect of calcination rate on petroleum coke properties
H. Sugii, K. Esumi, H. Honda, and H. Oda	821	Characterization of carbonaceous gel beads prepared in presence of polymer using water-in-oil emulsion
F. J. M. Rietmeijer	827	A transmission electron microscope study of experimentally shocked pregraphitic carbon
J. M. Jones, A. W. Harding, S. D. Brown, and K. M. Thomas	833	Detection of reactive intermediate nitrogen and sulfur species in the combustion of carbons that are models for coal chars
C. Moreno-Castilla, J. Rivera-Utrilla, M. V. López-Ramón, and F. Carrasco-Marín	845	Adsorption of some substituted phenols on activated carbons from a bituminous coal
N. Dilsiz, N. K. Erinċ, E. Bayramil, and G. Akovali	853	Surface energy and mechanical properties of plasma-modified carbon fibers

Letters to the Editor

R. B. Heimann, S. Fujiwara, Y. Kakudate, Y. Koga, T. Komatsu, and M. Nomura	859	A new carbon form obtained by weak shock compression of carbyne
W. Gu, M. A. Wilson, K. J. Fisher, I. G. Dance, G. D. Willett, D. Ren, and I. B. Volkova	862	Fullerenes and shungite
	865	Carbon News
	867	Carbon Calendar

VOLUME 33, NUMBER 7

1995

SPECIAL ISSUE:*Nanotubes**Contents*

S. Iijima and M. Endo	869	Editorial
M. S. Dresselhaus	871	Preface: Carbon nanotubes
M. Endo, K. Takeuchi, K. Kobori, K. Takahashi, H. W. Kroto, and A. Sarkar	873	Pyrolytic carbon nanotubes from vapor-grown carbon fibers
M. S. Dresselhaus, G. Dresselhaus, and R. Saito	883	Physics of carbon nanotubes
J. W. Mintmire and C. T. White	893	Electronic and structural properties of carbon nanotubes
C.-H. Kiang, W. A. Goddard III, R. Beyers, and D. S. Bethune	903	Carbon nanotubes with single-layer walls
K. Sattler	915	Scanning tunneling microscopy of carbon nanotubes and nanocones
D. T. Colbert and R. E. Smalley	921	Electric effects in nanotube growth
R. S. Ruoff and D. C. Lorents	925	Mechanical and thermal properties of carbon nanotubes

S. Ihara and S. Itoh	931	Helically coiled and toroidal cage forms of graphitic carbon
J.-P. Issi, L. Langer, J. Heremans, and C. H. Olk	941	Electronic properties of carbon nanotubes: Experimental results
X. K. Wang, X. W. Lin, S. N. Song, V. P. Dravid, J. B. Ketterson, and R. P. H. Chang	949	Properties of buckytubes and derivatives
P. C. Eklund, J. M. Holden, and R. A. Jishi	959	Vibrational modes of carbon nanotubes; Spectroscopy and theory
T. W. Ebbesen and T. Takada	973	Topological and SP ³ defect structures in nanotubes
Y. Saito	979	Nanoparticles and filled nanocapsules
D. Ugarte	989	Onion-like graphitic particles
U. Zimmermann, N. Malinowski, A. Burkhardt, and T. P. Martin	995	Metal-coated fullerenes
L. B. Ebert	1007	<i>Book reviews</i>
L. B. Ebert	1011	List of issued U.S. patents containing the terms buckminsterfullerene or fullerene as of April 25, 1995
	1017	Carbon News
	1019	Carbon Calendar

VOLUME 33, NUMBER 8

1995

Contents

R. J. J. Jansen and H. van Bekkum	1021	XPS of nitrogen-containing functional groups on activated carbon
K.-M. Beinborn, M. Müller and K. J. Hüttinger	1029	The significance of the fibre coating in the production of carbon fibre-reinforced carbons from HT carbon fibres. I. Poly(dimethylsiloxane) and poly(methylphenylsiloxane) coatings
M. Müller, K.-M. Beinborn and K. J. Hüttinger	1043	The significance of the fibre coating in the production of carbon fibre-reinforced carbons from HT carbon fibres and phenolic resin as matrix precursor. II. Phenolic resin coatings
K. Putyera, J. Jagiello, T. J. Bandosz and J. A. Schwarz	1047	Micropore structure development in poly(sodium-4-styrenesulfonate) derived carbons

W. H. Glime and J. D. Cawley	1053	Oxidation of carbon fibers and films in ceramic matrix composites: a weak link process
R. Fujiura, T. Kojima, M. Komatsu and I. Mochida	1061	Mechanical properties of binderless carbon mould prepared from heat-treated mesophase pitch of controlled grain size
I. Mochida, K. H. An and Y. Korai	1069	Preparation of nitrogen containing pitches from quinoline and isoquinoline by aid of AlCl_3
I. Mochida, K. H. An and Y. Korai	1079	Catalytic condensation of isoquinoline into pitch in higher yield in the presence of nitro solvents
A. Oya, S. Yoshida, J. Alcaniz-Monge and A. Linares-Solano	1085	Formation of mesopores in phenolic resin-derived carbon fiber by catalytic activation using cobalt
Sung Yong Cho	1091	The effect of presorbed water on the adsorption of CFC-113 by a carbon adsorbent
A. Seron, J. Thebault and F. Beguin	1097	Ceramic coatings for carbonaceous composites from kaolinite
M. Molina-Sabio, F. Rodríguez-Reinoso, F. Caturla and M. J. Sellés	1105	Porosity in granular carbons activated with phosphoric acid
M. G. Dobb, H. Guo and D. J. Johnson	1115	Image analysis of lattice imperfections in carbon fibres
J. Walter and H. P. Boehm	1121	Stability of graphite intercalation compounds with TaCl_5 or NbCl_5 against water or dilute acids—a study with XRD, SEM/EDS and electron microprobe analysis (EMPA)
J. M. Jones and K. M. Thomas	1129	Carbon-13 materials as models for NO_x and N_2O release during coal char combustion
C. Y. Cha and Y. Kong	1141	Enhancement of NO_x adsorption capacity and rate of char by microwaves
D. Cazorla-Amorós, A. Linares-Solano, F. H. M. Dekker and F. Kapteijn	1147	Isotopic steady-state and step-response study on carbon gasification catalyzed by calcium
J. A. Moulijn and F. Kapteijn	1155	Towards a unified theory of reactions of carbon with oxygen-containing molecules
S. Motojima, I. Hasegawa, S. Kagiya, K. Andoh and H. Iwanaga	1167	Vapor phase preparation of micro-coiled carbon fibers by metal powder catalyzed pyrolysis of acetylene containing a small amount of phosphorus impurity

Letters to the Editor

- | | | |
|---|------|---|
| J. C. Gonzalez,
M. T. Gonzalez,
M. Molina-Sabio,
F. Rodríguez-Reinoso and
A. Sepulveda-Escribano | 1175 | Porosity of activated carbons prepared from different lignocellulosic materials |
| W. L. Zhou,
Y. Ikuhara,
W. Zhao and
J. Tang | 1177 | A transmission electron microscopy study of amorphization of graphite by mechanical milling |
| M. Molina-Sabio,
F. Caturla and
F. Rodríguez-Reinoso | 1180 | Influence of the atmosphere used in the carbonization of phosphoric acid impregnated peach stones |
| M. Martínez,
F. Rodríguez-Reinoso,
P. Torregrosa,
D. Romero and
R. Santamaria | 1182 | A new parameter relating the properties of semicokes and the resulting sintered carbons |
| S. Y. Cho | 1184 | A study on adsorption of trichloromonofluoroethane by an activated carbon pellet |
| I. Mochida,
M. Egashira,
H. Koura,
K. Dakeshita,
S.-H. Yoon and
Y. Korai | 1186 | Carbonization of C ₆₀ and C ₇₀ fullerenes to fullerene soot |
| | 1189 | Carbon News |
| | 1192 | Carbon Calendar |

VOLUME 33, NUMBER 9

1995

Contents

- | | | |
|---|------|--|
| P. Dupel,
X. Bourrat and
R. Pailler | 1193 | Structure of pyrocarbon infiltrated by pulse-CVI |
| G. Cacciola,
G. Restuccia and
L. Mercadante | 1205 | Composites of activated carbon for refrigeration adsorption machines |
| S. Vaidyaraman,
W. J. Lackey
P. K. Agrawal and
G. B. Freeman | 1211 | Forced flow-thermal gradient chemical vapor infiltration (FCVI) for fabrication of carbon/carbon |
| R. L. Jacobsen,
T. M. Tritt,
J. R. Guth,
A. C. Ehrlich and
D. J. Gillespie | 1217 | Mechanical properties of vapor-grown carbon fiber |

A. Moissette, A. Burneau, J. Dubessy, H. Fuzellier and M. Lelaurain	1223	Uranyl-sulfate graphite intercalation compounds II. Structural and spectroscopic studies
J. J. Fernández, A. Figueiras, M. Granda, J. Bermejo, J. B. Parra and R. Menéndez	1235	Modification of coal-tar pitch by air-blowing II. Influence on coke structure and properties
M. S. Solum, R. J. Pugmire, M. Jagtoyen and F. Derbyshire	1247	Evolution of carbon structure in chemically activated wood
S. Biniak, B. Dzialeńdziak and J. Siedlewski	1255	The electrochemical behaviour of carbon fibre electrodes in various electrolytes. Double-layer capacitance
J.-Y. Tilquin, R. Côté, G. Veilleux, D. Guay, J. P. Dodelet and G. Denès	1265	Preparation and chemical reduction of Pt(IV) chloride-GICs: supported Pt vs Pt inclusion graphite compounds
H. T. Tsou and W. Kowbel	1279	A hybrid PACVD SiC/CVD Si ₃ N ₄ /SiC multilayer coating for oxidation protection of composites
H. T. Tsou and W. Kowbel	1289	A hybrid PACVD B ₄ C/CVD Si ₃ N ₄ coating for oxidation protection of composites
Z. Hu and E. F. Vansant	1293	Chemical activation of elutrilithe producing carbon-aluminosilicate composite adsorbent
M. Nakashima, S. Shimada, M. Inagaki and T. A. Centeno	1301	On the adsorption of CO ₂ by molecular sieve carbons—volumetric and gravimetric studies
P. J. M. Carrott	1307	Molecular sieve behaviour of activated carbons
K. A. G. Amankwah and J. A. Schwarz	1313	A modified approach for estimating pseudo-vapor pressures in the application of the Dubinin-Astakhov equation
L. Kavan, J. Hlavatý, J. Kastner and H. Kuzmany	1321	Electrochemical carbyne from perfluorinated hydrocarbons: synthesis and stability studied by Raman scattering
E. Papirer, A. Polania-Leon, J.-B. Donnet and P. Montagnon	1331	Fixation of potassium aurocyanide on active carbons
A. Tressaud, M. Chambon, V. Gupta, S. Flandrois and O. P. Bahl	1339	Fluorine-intercalated carbon fibers III. A transmission electron microscopy study

Letters to the Editor

M. Sato, H. Isobe, K. Yamamoto, T. Iiyama and K. Kaneko	1347	Oriented micrographic carbon films of high surface area
Y. Kaburagi and Y. Hishiyama	1349	Anomalous Hall coefficient in kish graphite
	1351	Carbon News
	1356	Carbon Calendar

VOLUME 33, NUMBER 10

1995

Contents

	1357	Editorial
M. Braun, J. Kramer and K. J. Hüttinger	1359	Kinetics of mesophase formation in a stirred tank reactor and properties of the products—VI. Catalysis by iron benzoate and naphthoate
G. L. Aranovich and M. D. Donohue	1369	Adsorption isotherms for microporous adsorbents
Sei-Min Park, E. Yasuda, T. Akatsu, Y. Tanabe, M. Kakihana and K. Ozawa	1377	Evolution of microtexture in furan resin-derived carbon with heat-treatment
K. Stańczyk, R. Dziembaj, Z. Piwowarska and S. Witkowski	1383	Transformation of nitrogen structures in carbonization of model compounds determined by XPS
A. Ahmadpour and D. D. Do	1393	Characterization of modified activated carbons: equilibria and dynamics studies
Y. Hishiyama and M. Nakamura	1399	X-ray diffraction in oriented carbon films with turbostratic structure
H. K. Chagger, F. E. Ndaji, M. L. Sykes and K. M. Thomas	1405	Kinetics of adsorption and diffusional characteristics of carbon molecular sieves
E. Biron and R. Stavisky	1413	Deactivation of ASC Whetlerite charcoal upon adsorption of cyanogen chloride
C. Moreno-Castilla, J. Rivera-Utrilla, J. P. Joly, M. V. López-Ramón, M. A. Ferro-García and F. Carrasco-Marín	1417	Thermal regeneration of an activated carbon exhausted with different substituted phenols

P. Čapková, D. Rafaja, J. Walter, H. P. Boehm, K. F. van Malssen and H. Schenk	1425	Real-time X-ray diffraction study of concentration profiles in CuCl ₂ -intercalated graphite during deintercalation
Lj. V. Rajaković M. R. Ilić, P. B. Jovanić and P. B. Radošević	1433	Stoichiometric analysis of chemisorption of hydrogen-cyanide onto activated carbon cloth
T. Kodama, T. Sano, T. Yoshida, M. Tsuji and Y. Tamaura	1443	CO ₂ decomposition to carbon with ferrite-derived metallic phase at 300°C
H. Darmstadt, C. Roy and S. Kaliaguine	1449	Characterization of pyrolytic carbon blacks from commercial tire pyrolysis plants
Y. Matsumura, S. Wang and J. Mondori	1457	Interactions between disordered carbon and lithium in lithium ion rechargeable batteries
R. Addink, P. A. I. P. Cnubben and K. Olie	1463	Formation of polychlorinated dibenzo- <i>p</i> -dioxins/dibenzofurans on fly ash from precursors and carbon model compounds
J. M. Skowroński and H. Shioyama	1473	In-situ XRD studies during electrochemical processes in the ternary CrO ₃ -H ₂ SO ₄ -graphite intercalation compound
Z. Kuang, I. Thonstad and M. Sørli	1479	Effects of additives on the electrolytic consumption of carbon anodes in aluminium electrolysis
J. W. Klett and D. D. Edie	1485	Flexible towpreg for the fabrication of high thermal conductivity carbon/carbon composites
Y. Kaburagi and Y. Hishiyama	1505	<i>Letter to the editor</i> Linear dependence of transverse magnetoresistance on magnetic field in kish graphite
	1507	Carbon news
	1508	Carbon calendar

Contents

K. A. Trick and T. F. Saliba	1509	Mechanisms of the pyrolysis of phenolic resin in a carbon/phenolic composite
T. L. Dhani, O. P. Bahl and P. K. Jain	1517	Carbon-carbon composites made with oxidised PAN (Panex) fibers
W. Wang, K. M. Thomas, R. M. Poultney and R. R. Willmers	1525	Iron catalysed graphitisation in the blast furnace

M. Nakahara, T. Takada, H. Kumagai and Y. Sanada	1537	Surface chemistry of carbon black through curing process of epoxy resin
J. Zawadzki	1541	Infrared study of the interaction of acetone with pure and metal-containing carbons
Y. Tanabe, T. Saitoh, T. Akatsu and A. Sawaoka	1547	Crater formation of carbon materials by impact of a high velocity sphere
M. G. Dobb, H. Guo, D. J. Johnson and C. R. Park	1553	Structure-compressional property relations in carbon fibres
T. Jawhari, A. Roid and J. Casado	1561	Raman spectroscopic characterization of some commercially available carbon black materials
J.-I. Hayashi, M. Nakashima, K. Kusakabe, S. Morooka and S. Mitsuda	1567	Rapid stabilization of pitch fiber precursor by multi-step thermal oxidation
F. Karpowicz, J. Hearn and M. C. Wilkinson	1573	The quantitative use of the Bohart-Adams equation to describe effluent vapour profiles from filter beds
C. Hontoria-Lucas, A. J. López-Peinado, D. López-González, M. L. Rojas-Cervantes and R. M. Martin-Aranda	1585	Study of oxygen-containing groups in a series of graphite oxides: physical and chemical characterization
N. El Mejdoub, B. Calaminus, G. Trouvé, P. Gilot and L. Delfosse	1593	Reactivity of the soot produced during pyrolysis of hexachlorobenzene. Influence of the presence of chlorine
H. P. Fritz and R. Hiemeyer	1601	Formation <i>in situ</i> of perfluoroalkylated fullerenes
I. Mochida, S. Yatsunami, Y. Kawabuchi and Y. Nakayama	1611	Influence of heat-treatment on the selective adsorption of CO ₂ in a model gas over molecular sieve carbons
T. Takeichi, Y. Kaburagi, Y. Hishiyama and M. Inagaki	1621	Effect of uniaxial cold-drawing on graphitization of polyimide films
S. W. Hudnut and D. D. L. Chung	1627	Use of submicron diameter carbon filaments for reinforcement between continuous carbon fiber layers in a polymer-matrix composite

V. Gupta, R. B. Mathur, O. P. Bahl, A. Marchand and S. Flandrois	1633	Structural and transport properties of bromine intercalated carbon fibers
J. R. Pels, F. Kapteijn, J. A. Moulijn, Q. Zhu and K. M. Thomas	1641	Evolution of nitrogen functionalities in carbonaceous materials during pyrolysis
		<i>Letters to the editor</i>
J. A. Menéndez, M. J. Illán-Gómez, C. A. León Y León and L. R. Radovic	1655	On the difference between the isoelectric point and the point of zero charge of carbons
F. Goutfer-Wurmser, C. Hérold and P. Lagrange	1657	Superdense potassium concentration in some graphite intercalation compounds
	1660	Carbon news
	1162	Carbon calendar

VOLUME 33, NUMBER 12

1995

Contents

T. Jiang and K. Xu	1663	FTIR study of ultradispersed diamond powder synthesized by explosive detonation
T. Cheung, M. Turpin and B. Rand	1673	Controlled stress, oscillatory rheometry of mesophase-pitches
X. Shui, C. A. Frysz and D. D. L. Chung	1681	Solvent cleansing of the surface of carbon filaments and its benefit to electrochemical behavior
C.-C. Liu, A. B. Walters and M. A. Vannice	1699	Measurement of electrical properties of a carbon black
F. G. Emmerich	1709	Evolution with heat treatment of crystallinity in carbons
C. Nguyen and D. D. Do	1717	Preparation of carbon molecular sieves from macadamia nut shells
V. Ivanov, A. Fonseca, J. B. Nagy, A. Lucas, P. Lambin, D. Bernaerts and X. B. Zhang	1727	Catalytic production and purification of nanotubes having fullerene-scale diameters
H. Preiss, L.-M. Berger and M. Braun	1739	Formation of black glasses and silicon carbide from binary carbonaceous/silica hydrogels

L. Filipozzi, A. Derré, J. Conard, L. Piraux and A. Marchand	1747	Local order and electrical properties of boron carbonitride films
A. Fonseca, K. Hernadi, J. B.Nagy, Ph. Lambin and A. A. Lucas	1759	Model structure of perfectly graphitizable coiled carbon nanotubes
M. Molina-Sabio, M. A. Muñecas, F. Rodríguez-Reinoso and B. McEnaney	1777	Adsorption of CO ₂ and SO ₂ on activated carbons with a wide range of micropore size distribution
T. Sogabe, T. Matsuda, K. Kuroda, Y. Hirohata, T. Hino and T. Yamashina	1783	Preparation of B ₄ C-mixed graphite by pressureless sintering and its air oxidation behavior
T. Abe, Y. Mizutani, N. Shinoda, E. Ihara, M. Asano, T. Harada, M. Inaba and Z. Ogumi	1789	Debye-Waller factors of FeCl ₃ - and ICl-graphite intercalation compounds
	1795	Carbon News
	1796	Carbon Calendar
	iii	List of Contents of Volume 33
	xxiii	Author index
	xxvii	Keyword index

